

REMARKS

In order to promote administrative efficiency and better communication, the Examiner is invited to make suggestions at any time during the proceedings, via phone, fax or e-mail, whenever such suggestions are within the Examiner's discretion as an aid to placing the claims in order for allowance in a timely manner.

Examiner's Point 3: Rejection under 112, Second Paragraph:

Concerning the Examiner's rejection of claims 18-27 under 112, regarding the term "super" and also the phrase "super elastic activation in the shaft", Applicant has amended the claims to recite the requirement of "an elongated, shaft member made substantially of an alloy selected from a group of alloys consisting of super-elastic, bi-metal alloys and super-elastic tri-metal alloys, including nickel-titanium alloys, received within the opening". The amendment makes very specific that the material is **selected from a group of materials consisting of super-elastic bi- and tri-metal alloys, including nickel-titanium alloys**. Otherwise, the Applicant traverses the rejection on the grounds that the term "super-elastic" is used in a form commonly understood in the art, and not as a relative term.

As for the Examiner's first assertion, the term "super" cannot be read separately from the compound word "super-elastic" in materials science, a well-understood term. The Examiner is invited to perform, for example, a Google™ search of the compound words "super-clastic" and alloy. He will find approximately 3200 references thereto, which Applicant believes are consistent and not "different", an adjective that the Examiner alone has used to described the Google results. Thus, it is re-asserted that the use of the compound word "super-clastic" is definite and clearly understood by the person of ordinary skill in the art. Nevertheless, it is believed that although Applicant asserts that the prior language was more than clear and definite (such language having been confirmed as clear and definite by other, arguably competent Examiners), the

currently presented language may better satisfy this Examiner's particular need for clarification.

As for the Examiner's second assertion, Applicant has amended claim 18, the claim upon which the remaining claims depend, by clarifying that "the shaft and the collet are urged into surface-to-surface contact sufficiently to induce a martensitic activation of the super-elastic alloy, thus securing the members together in a fixed relative position". It is believed that although Applicant asserts that the prior language was more than clear and definite, the currently presented language may better satisfy this Examiner's particular need for clarification. Acknowledgement of this fact is respectfully requested.

Examiner's Point 4: 102 Rejections based on Bartholomew US 3,610,056 and Belef et al US 6,078,831:

The Examiner rejected claims 18-23 & 25-27 under 35 U.S.C. §102(b) as being anticipated by Bartholomew. Applicant has amended claim 18 to overcome this rejection. Claim 18 should now present wording which should satisfy the Examiner's particular need for clarity. As such, it cannot be said that Bartholomew anticipates Applicant's invention as now claimed, as Bartholomew clearly lacks any "elongated, tubular shaft member made substantially of an alloy selected from a group of alloys consisting of super-elastic, bi-metal alloys and super-elastic tri-metal alloys, including nickel-titanium alloys, received within the opening", or any "sleeve member having a bore that receives the exterior surface of the collet, whereupon relative motion among at least two of the members causes the opening to contact the shaft, the shaft and the collet being urged into surface-to-surface contact sufficiently to induce a martensitic activation of the super-elastic alloy, thus securing the members together in a fixed relative position." Lacking the same elements, a §102 rejection cannot stand. Acknowledgement of this fact is respectfully requested.

The Examiner has further rejected claims 18-27 under §102(e) as being anticipated by Belef, asserting that Figs 12 and 13 of Belef show a torque-transmitting

coupling assembly comprising similar elements to that of Applicant's invention. However, in light of the arguments presented on this point in the prior response, and the amendments currently made, it is believed that this rejection is overcome. In particular, it is believed that the language "substantially", when referring to the elongated shaft, distinguishes from Bartholomew. Further, the limitations which are apparent from the addition of the language "tubular" to the shaft (whether the tube be cylindrical, square or of some other shape), exclude, to one of ordinary skill in the art, a wound cable or spring.

Further, Applicant repeats that all embodiments in Belef show the telescoping member 48 as a solid tube and the remaining part of the drive shaft as a hollow, coiled member. In such a case, even if the spiral wound member were made of nitinol, the contact between the "collet" 116 and the spiral wound member would be spiral, substantially line contact and not substantially surface-to-surface as required in Applicant's invention. Further, Belef is ambiguous in that it describes a separate "drive cable 50" which is preferably "counterwound" which appears to be that which the "collet" 116 is connected (see fig. 3). In any case, further, no super-elastic activation is discussed. It is respectfully submitted therefore that Belef does not anticipate Applicant's invention because it does not clearly show super-elastic activation between the collet and the drive shaft. For any one of the cited reasons, it is believed that the §102(c) rejection is overcome. Acknowledgement of this fact is respectfully requested.

Examiner's Point 6: Rejection under §103 based on Krivec et al US 5,746,298 in view of Sohn US 5,988,171;

The Examiner rejected claims 18-27 under 103(a) as being unpatentable over Krivec in view of Sohn, asserting that Figures 1-4 "show a torque-transmitting coupling assembly comprising: a split collet member 40 having an exterior surface and an opening; an elongated shaft member 30, 65 received within the opening; a sleeve member 45 having a bore that receives the exterior surface of the collet 40; and a cutting tool-bit or powered instrument (see col. 4, line 35) connected to the collet...."

Applicant traverses this rejection on the grounds that Krivec's shaft 31 is completely enclosed with the handle of the device and thus, can be made of any material, as super-elasticity adds no advantage in such a non-flexing, constrained application. Therefore, although Sohn teaches a flexible shaft which may benefit from super-elastic alloys (particularly as it must be bent around corners to an optimal operating position), Krivec lacks any teaching or suggestion to use a super-elastic alloy in the shaft referred to as an elongated reaction post 30, made of "suitable metal". An analogous shaft, if shown in Krivec, would have to be a super-elastic shaft which one might attach to the elongated reaction post at square socket 38, namely, the drive shank 65, not the reaction post 30 itself, with which the collet interacts. Such a shaft is clearly not shown. Therefore, it is respectfully asserted that the combination proposed by the Examiner is an example of impermissible hindsight reconstruction of the invention. It is believed therefore that this rejection is overcome and that the Examiner may properly pass the claims on to allowance. Acknowledgement of this fact is respectfully requested.

Point 7: Request for an interview:

Applicant requests an interview with the Examiner and informs him that the Undersigned is generally available the Mornings, Eastern Standard Time. To facilitate such an interview, Applicant requests that the Examiner contact the Undersigned by email at patents@bugnion.ch at his earliest convenience.

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Point 8: Conclusion

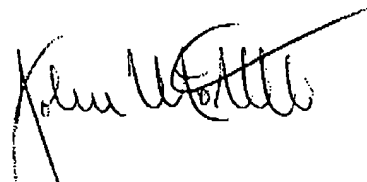
Applicant has made a diligent effort to advance the prosecution of this application by amending claims, and by pointing out herein with particularity how the claims now presented are patentably distinct from the prior art of record. Therefore, Applicant respectfully submits that the claims, as amended, are now in condition for allowance. No new matter has been entered by this amendment. Any limitations to the claims are made solely for the purpose of expediting the prosecution of the application

and, unless otherwise expressly stated, are not made to narrow, vis-à-vis the prior art, the scope of protection which any subsequently issuing patent might afford. Again, if the Examiner has further questions, he is invited to contact the undersigned at phone 011-4122-747-7849, fax at 011-4122-346-8960 (Geneva is 6 hours ahead of Eastern Std Time), or e-mail at patents@bugnion.ch.

Applicant petitions the Commissioner for an Extension of Time under 37 CFR §1.136 for a period of 0 month and the Undersigned authorizes the Commissioner to charge any fee or credit any overpayment of any fee under 37 CFR §1.16 and §1.17 which may be required in this application to the deposit account of BUGNION S.A., no. 50-0800.

Respectfully submitted,

Date : January 31, 2005


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